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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,756	08/14/2003	Junaid Syed	3017	1755
31424 7.	590 09/08/2005		EXAMINER	
BABCOCK IP LLC			A, MINH D	
24154 LAKESIDE DRIVE LAKE ZURICH, IL 60047			ART UNIT	PAPER NUMBER
			2821	
			DATE MAILED: 00/08/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)					
	10/604,756	SYED ET AL.					
Office Action Summary	Examiner	Art Unit					
	Minh D A	2821					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply if NO period for reply is specified above, the maximum statutory period who Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	16(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days till apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE!	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 6/8/05	<u>5</u> .						
2a) This action is <b>FINAL</b> . 2b) ⊠ This	This action is FINAL. 2b)⊠ This action is non-final.						
,,,,,	)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.					
Disposition of Claims							
4) Claim(s) 1-22 is/are pending in the application.							
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>15-17</u> is/are allowed.	)⊠ Claim(s) <u>15-17</u> is/are allowed.						
6) Claim(s) <u>1-6,8-12,14 and 18-22</u> is/are rejected.	• • ————						
7)⊠ Claim(s) <u>7 and 13</u> is/are objected to.							
8) Claim(s) are subject to restriction and/or	relection requirement.						
Application Papers							
9)☐ The specification is objected to by the Examine	r <b>.</b>						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correcti		4					
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action of form P10-152.					
Priority under 35 U.S.C. § 119							
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:	priority under 35 U.S.C. § 119(a)	-(d) or (f).					
<ol> <li>Certified copies of the priority documents</li> </ol>	s have been received.						
2. Certified copies of the priority documents							
<ol><li>Copies of the certified copies of the prior</li></ol>		ed in this National Stage					
application from the International Bureau	* **	٠					
* See the attached detailed Office action for a list of	or the certified copies not receive	u.					
Attachment(s)							
1) Notice of References Cited (PTO-892)	4) Interview Summary						
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ul>	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	atent Application (PTO-152)					
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. Application/Control Number: 10/604,756

Art Unit: 2821

### **DETAILED ACTION**

# Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-3 and 9 are rejected under 35 U.S.C. 102(b) as being unpatentable by Levy (US 4,581,615).

Regarding claim 1, Levy discloses a radome (10) for a reflector antenna (11) having a reflector with a vertex area, the radome(10) comprising a central portion (25) surrounded by an outer portion (23) having a radius configured to focus a surrounded by an outer portion (23), reflected component of an RF signal reflected by the reflector antenna to the vertex area; and the outer portion (23) having a radius greater than the central portion (25) and the central portion consisting of a dielectric material. See figures 1-8, col.3, lines 54-68 to col.7, lines 1-45.

Regarding claim 2, Levy discloses that, a transition between the central portion and the outer portion is located at a position where the reflected component (see focus (20 and 22) from the outer portion closest to the transition reflects from the reflector without intersecting with a feed assembly of the reflector antenna (11). See figures 1-5.

Regarding claim 3, Levy discloses that, the radome (10) is injection molded dielectric plastic. See col.4, lines 1-15.

Application/Control Number: 10/604,756

Art Unit: 2821

Regarding claim 9, Levy discloses the RF absorbing material located in the vertex area. See figure 1-5.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 4-6, 8, 10-12, 14-18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Levy (US 4,581,615) in view of Ellis et al (US 6,191,753).

Regarding claims 4-6 and 10, Levy discloses a radome (10) for a reflector antenna (11) having a reflector with a vertex area. See figures 1-8, col.3, lines 54-68 to col.7, lines 1-45.

Levy does not teach that, radome (10) adapted to cover an a plurality of tabs formed proximate a periphery of the open end of the reflector, the tabs configured to pass through a corresponding plurality of cut outs formed in a periphery of the reflector.

However, Ellis discloses the cover assembly (320) for covering a plurality of tabs (324-328) formed proximate a periphery of the open end of the reflector, the tabs (324-328) configured to pass through a corresponding plurality of cut outs formed in a periphery of the reflector. See figures 4-15, col.3, lines 59-67 to col.11, lines 1-34.

It would have been an obvious to one of ordinary skill in the art at the time the invention was made to employ the cover assembly for covering cover an a plurality of

Application/Control Number: 10/604,756

Art Unit: 2821

tabs formed proximate a periphery of the open end of the reflector, the tabs configured to pass through a corresponding plurality of cut outs formed in a periphery of the reflector such as that suggested by Ellis in the radome antenna of Levy in order to protect the antenna from ice, snow and wind.

Regarding claims 8, 11 and 19, Levy does not disclose that the tabs retain the radome on the reflector when the radome is rotated after the tabs are passed through the cut outs. However, Ellis discloses the tabs retain the radome on the reflector when the radome is rotated after the tabs are passed through the cut outs. See figures 15-22.

Regarding claim 12, Levy does not disclose a plurality of support posts formed proximate the periphery of the radome which the reflector seats against when the tabs are passed through the cutouts. However, Ellis discloses all limitations in figures 4-22.

Regarding claim 14, Levy does not disclose that, a plurality of absorbing retainers arranged proximate a periphery of the radome. However, Ellis discloses a plurality of absorbing retainers arranged proximate a periphery of the radome. See figures 15-22.

Regarding claims 18 and 20-22, Levy discloses an antenna comprising'. a feed; a reflector (11)', and a radome (10) adapted to cover said reflector.

Levy does not disclose the reflector (11) and radome (11) having interlocking peripheral structures configured such that said radome is joined to said reflector by mating said structures and rotating said radome relative to said reflector.

However, Ellis discloses the cover assembly (320) having interlocking peripheral structures configured such that said radome is joined to said reflector by mating said

structures and rotating said radome relative to said reflector. See figures 4-22, col.3, lines 59-67 to col.11, lines 1-34.

It would have been an obvious to one of ordinary skill in the art at the time the invention was made to employ the cover assembly (320) having interlocking peripheral structures configured such that said radome is joined to said reflector by mating said structures and rotating said radome relative to said reflector such as that suggested by Ellis in the radome antenna of Levy in order to protect the antenna from ice, snow and wind.

## Allowable Subject Matter

5. Claims 7, 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach that, a plurality of locking clips configured to compress when the tabs are passed through the cut outs; the locking clips decompressing into the cut outs when the radome is rotated after the tabs are passed through the cut outs; the locking clips decompressed into the cut outs inhibiting further rotation of the radome recited in dependent claims 7 and 13.

The prior art does not teach that, a reflector antenna, comprising: a reflector with a vertex area; a feed assembly coupled to the reflector proximate the vertex area; a plurality of cut outs in a periphery of the reflector, a radome adapted to cover an open

Application/Control Number: 10/604,756

Art Unit: 2821

end of the reflector', the radome having a plurality of tabs arranged to correspond with the cut outs; the tabs and the cut outs co-operating to removably secure the radome to the reflector', the radome having a central portion with a radius selected to focus a reflected component of RF signals transmitted by the reflector antenna upon the vertex area; and the vertex area covered by an RF absorbing material recited in independent claim 15.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Butle (US 6,437,757) and Desargant et al. (US 6,570,540) are cited to show a reflector antenna.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Minh A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 –2:30 PM).

If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Don Wong, can be reached on (571) 272-1834. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and (703) 872-9319 for final communications.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (571) 272-1553.

Examiner

Minh A

Art unit 2821

8/15/05

Page 7

Wilson Lee Rrimaly Examiner